

IN THE CLAIMS:

Please cancel claims 19-62, without prejudice or disclaimer.

Please amend the claims pursuant to 37 C.F.R. 1.121 as follows (see the accompanying "marked up" version pursuant to 1.121):

Sub 3
814
80. (Amended) The galactose oxidase of claim 79, further comprising a silent mutation at S550.

In addition, please add the following new claims:

Sub 1
B3
83. (New) A galactose oxidase which has a mutation in at least one amino acid selected from the group consisting of A3, S10, M70, P136, T218, L312, N413, C515, N535, N537, S550, and S610.

815
84. (New) The galactose oxidase of claim 83, further comprising at least one amino acid mutation selected from the group consisting of G195 and V494.

85. (New) The galactose oxidase of claim 83, wherein the mutation is selected from the group consisting of S10P, M70V, N413D, C515S, N535D, and N537D.

86. (New) The galactose oxidase of claim 85, further comprising at least one amino acid mutation selected from the group consisting of G195E and V494A.

87. (New) A galactose oxidase which has a mutation in amino acid N537.

88. (New) The galactose oxidase of claim 87, wherein the mutation is N537D.

89. (New) A galactose oxidase which has mutations in amino acids V494 and C515.

90. (New) The galactose oxidase of claim 89, wherein the mutations are V494A and C515S.

91. (New) A galactose oxidase which has mutations in amino acids V494 and P136.

92. (New) The galactose oxidase of claim 91, wherein the V494 mutation is V494A.

93. (New) A galactose oxidase which has mutations in amino acids V494, P136, and S10.

94. (New) The galactose oxidase of claim 93, wherein the V494 mutation is V494A, and the S10 mutation is S10P.

95. (New) A galactose oxidase which has mutations in amino acids V494, P136, G195, and A3.

96. (New) The galactose oxidase of claim 95, wherein the V494 mutation is V494A, and the G195 mutation is G195E.

97. (New) A galactose oxidase which has mutations in amino acids V494, P136, L312, N535, and T218.

98. (New) The galactose oxidase of claim 97, wherein the V494 mutation is V494A, and the N535 mutation is N535D.

99. (New) A galactose oxidase which has mutations in amino acids V494, P136, and M70.

100. (New) The galactose oxidase of claim 99, wherein the V494 mutation is V494A, and the M70 mutation is M70V.

101. (New) A galactose oxidase which has mutations in amino acids V494, S10, P136, M70, G195, and N535.

102. (New) The galactose oxidase of claim 101, wherein the V494 mutation is V494A, the S10 mutation is S10P, the M70 mutation is M70V, the G195 mutation is G195E, and the N535 mutation is N535D.

103. (New) A galactose oxidase which has a mutation in amino acid N413.

104. (New) The galactose oxidase of claim 103, wherein the mutation is N413D.

105. (New) A galactose oxidase which has a mutation in amino acids N413 and S550.

106. (New) The galactose oxidase of claim 105, wherein the N413 mutation is N413D.

107. (New) A galactose oxidase which has a mutation in amino acids N413, S550, and V494.

108. (New) The galactose oxidase of claim 107, wherein the N413 mutation is N413D, and the V494 mutation is V494A.

109. (New) A galactose oxidase which has mutations in amino acids N413, S550, V494, and S610.

110. (New) The galactose oxidase of claim 109, wherein the N413 mutation is N413D, and the V494 mutation is V494A.

111. (New) A galactose oxidase having an amino acid sequence selected from the group consisting of SEQ ID NOS: 10-21.